

## ICON MANAGEMENT

DOTWRITER, the desktop publishing package for the TRS-80, has advantages and disadvantages, strong features and weak ones. It is strong on text, and provides very many alphameric fonts. It has only limited graphics capability, and does not, for example, include provision for inversion, mirroring, or reversal of icons.

However, software exists to convert the many icons available for PRINT SHOP and PRINTMASTER to be used with DOTWRITER. Further, the programs not only convert, but also invert, inverse, and/or mirror icons.

Understand, please, this difference between DOTWRITER and the other desktop publishers. DOTWRITER uses icons as is, so, for inversion, etc., they must be saved as wanted, that is, plain, inverted or whatever; the MSDOS publishers provide means for inverting, etc. as used.

Another difference is that files for DOTWRITER icons are limited to 52 icons; PRINT SHOP allows 140 icons per file, and PRINTMASTER imposes no limit. PRINT SHOP and DOTWRITER have limits because they read the entire file into memory for use.

With a growing collection of 1600 icons, and with the option of saving each in eight different modes (plain, inverted, etc., and combinations), one could be overwhelmed by saving each icon in each mode -- a catalog could have over 200 files, and twice that number of pages.

Results with DOTWRITER can be made the same as from the others, but the procedure is different.

It was decided to save the icons, plain, in the format of PRINT SHOP for three reasons. Such files can be converted to DOTWRITER (and inverted, etc. in the process). They use only 572 bytes per icon, as opposed to 616 in the DOTWRITER format. For present purposes, in which only a few icons a time are read into memory, very large files can be created and used, thus allowing entire desired classes of icons to appear in one file. (Several classes are represented by well over 52 icons each.) The PRINTMASTER format affords no advantages to the DOTWRITER user and is longer than PRINT SHOP.

So, the devised strategy for icon management is to save

icons in a few large files in PRINT SHOP format, and to convert them as needed into mostly temporary files for the job(s) at hand. (No doubt, users will develop a few small, permanent files of frequently-used converted icons.)

That necessitates a very good catalog of icons to enable their being accessed, and, in turn, that necessitates software to assemble the icons into suitable large files, to arrange the files appropriately, and to catalog them. Additional features are to enable the creation and editing of icons and to convert from PRINTMASTER format to PRINT SHOP.

The chosen file size is 616 icons, not the disk capacity of 625. 616 icons fill 11 pages of catalog, and leave disk space for an index.

PROGRAMS FOR DESKTOP-PUBLISHING ICON MANAGEMENT

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These programs are released as SHAREWARE. There is a suggested shareware donation for each program, as shown in its documentation. If the sum of the individual shareware donations for items you use exceeds \$40, the total suggested shareware donation in 1990 is \$40. Note: If you use P2DOT84, then you owe an additional \$15 to Paul F. Barnett, 3036 Elmwood Drive, Henderson, KY 42420. Folks, if Paul had not released his P2DOTx (Mod III), we'd have none of this system, and if I had not sent him a shareware fee, we'd have none of this in the Mod 4 mode. True story...I sent him his fee for P2DOTx; it was returned 'Addressee unknown'. So, I phoned him for a better address, and that is how we got started.

The main purpose of this family of Mod. 4 programs for PRINT SHOP icon management is to facilitate the use of the many available icons with DOTWRITER, and to provide PRINT SHOP-like icon facilities for the Mod. 4 user.

The programs are:

PM2PS/CMD - Convert PRINTMASTER icon files to PRINT SHOP format.  
ICONEDIT/CMD - Create and edit PRINT SHOP icons.  
ICONFORM/CMD - Print a grid for sketching PRINT SHOP icons.  
ICONSHOW/CMD - Display PRINT SHOP and PRINTMASTER icons.  
ICONMOVR/CMD - Move icons within and between PRINT SHOP files.  
ICONCAT/CMD - Print catalogs of PRINT SHOP and PRINTMASTER icon files.  
P2DOT84/CMD - Convert PRINT SHOP and PRINTMASTER icons to

DOTWRITER.  
 DOTSHOW/CMD - Display DOTWRITER icons  
 DOTCAT/CMD - Print catalogs of DOTWRITER icon files.  
 PS2PM/CMD - Convert PRINT SHOP icons to PRINTMASTER

Related programs include:

DOT2BAS/CMD - Convert DOTWRITER icon to BASIC DATA statements.

ENVELOPE/CMD - Print greeting-card envelopes.  
 ENVUPD/BAS - Substitute your return address for mine on envelopes.

How one gets PRINT SHOP and/or PRINTMASTER icon files from MS-DOS disk format to LS-DOS disk format is up to the user. If one can do that, then one can convert any newly created or edited icons from LS-DOS disk format to MS-DOS for use with PRINT SHOP or PRINTMASTER, provided one includes the appropriate names file.

There are in the MS-DOS world utility programs for doing most of what the present family of programs does in LS-DOS. The MS-DOS programs include PRINT SHOP TOOLS, PRINTMASTER TOOLS, and PM-PS-BAS.COM.

All work is on 8-bit icons, as for Epson printers, and all printing uses commands for the Epson FX printers.

In greater detail:

-PM2PS/CMD - Simple file-by-file conversion from one format to the other.

-PS2PM/CMD - Does the reverse, for your PRINTMASTER-using friends

-ICONEDIT/CMD - Enables creation and editing of icons, from scratch or from pre-existing icon file. When editing a pre-existing icon, the result can be saved back to its original location in the source file or saved to the end of any file. There are two modes for creation/editing: In the default magnified mode, each of the 4576 bits (possible dots) of an icon is represented at one of the 1920 screen locations; this requires windowing. Moving the cursor from one bit to another is done by use of the arrow keys; moving the window is done by use of <SHIFT> <ARROW> keys. In the condensed mode, which is not nearly so condensed as when an icon is printed, and which is reached by selecting D for display from the menu, a 1-character magnified window is available for editing.

- ICONFORM/CMD - Prints a grid, which serves for sketching an icon from scratch, on an Epson FX or compatible printer. The size and proportion of the grid is the same as that which is printed upon selecting P for print from the menu. I find that what looks good when sketched needs much 'heavying up' to look as good when printed.
- ICONSHOW/CMD - Displays an icon when the user responds to prompts for the file and icon number in the file. PRINT SHOP and PRINTMASTER users will note that the Mod. 4 software includes no names file.
- ICONMOVR/CMD - Main program for organizing icon files. ICONMOVR/CMD enables moving icons within and between files, and deleting icons. It includes special commands to copy a block of up to 8 icons to a disk buffer for export to another file, and to attach one file to another. Attach is like appending, but trailing bytes that are not part of an icon are over-written, and the user has the option to over-write icons. It is prudent to work only with backups of files, and to arrange small files as best one can before attaching them to each other to build large files, which are slower to re-organize.
- P2DOT84/CMD - This converts PRINT SHOP and PRINTMASTER icons to DOTWRITER format, and limits created DOTWRITER files to the proper 52 icons maximum. I was inspired by Paul Barnett's copyrighted Mod. III P2DOT8/CMD, and retained the look and feel of his program.
- ICONCAT/CMD - Print catalog of icons in PRINT SHOP or PRINTMASTER file, 56 per page. Pages and icons are numbered.
- DOTCAT/CMD - Print catalog of icons in DOTWRITER format, in same layout as that provided by ICONCAT, but with character (! thru T) identification, as required by DOTWRITER, instead of numbers.
- DOTSHOW/CMD - Display icons in an 8-bit DOTWRITER file. Faster than printing a catalog.
- DOT2BAS/CMD - Copies a selected DOTWRITER icon (hence, plain, inverted, or whatever) to a series of BASIC DATA statements, thus enabling one to print an icon from a BASIC program and include icons in other output.

-ENVELOPE/CMD - Prints, on Epson printer, a neat envelope the proper size for quarter-fold greeting cards made by DOTWRITER, PRINT SHOP, or PRINTMASTER. The envelope has the user's return address, the address of the addressee, and has also an icon printed on the back. A cutting guide is also printed.

-ENVUPD/BAS - BASIC program to enable user to modify ENVELOPE/CMD to substitute his/her return address for mine.

Future possibilities include a) a version of ICONEDIT for direct editing in high-resolution, as with PRINT SHOP, and b) a version of ICONMOVR for moving icons within and between DOTWRITER icon files.

I keep all the icons in a few large files, in PRINT SHOP format, and keep very good catalogs. That provides compactness to allow up to 625 icons per file (disk) and convertibility to working files. (I limit to 616 icons per file.) The files each contain, as far as possible, related icons. The file names should begin with the letters GR and have the extension /DAT. I converted all my PRINTMASTER icon files to PRINT SHOP; to that end, I wrote PM2PS/CMD. There is such a program, PS-PM-BAS.COM, for running under MS-DOS; it is slow.

ICONMOVR/CMD creates working storage files of PRINT SHOP icons.

For each DOTWRITER job that involves icons, by use of

P2DOT84/CMD, I create and use a temporary, sometimes even volatile, file of the icons needed for that job.